

THE MEDICAL NEWS AND LIBRARY.

VOL. XVII.

OCTOBER, 1859.

No. 202.

CONTENTS.

GULSTONIAN LECTURES.		Medical Lectures in Philadelphia	209
On Fever and Inflammation	189	Rush Medical College	210
CLINICS.		Medical College of Alabama	210
HOSPITAL NOTES AND CLEANINGS.			
Cases of Addison's Disease	201	<i>Foreign Intelligence.</i> —Death from Chloroform	210
Two Cases illustrating the benefit of Antiphlogistic Treatment after Severe Injuries to the Lungs	202	Anæsthesia by Chloroform	212
Disease of the Shoulder-Joint—Resection of the Head of the Humerus—Recovery	203	Occasional danger of the Ophthalmoscope	213
Different Modes of Performing Lithotripsy in the English Hospitals	203	Is Inguinal Hernia really rare in Female Children ?	213
Enormous Ranula	204	Paralysis of the Pharynx and General Paralysis after Diphtheria	213
Copious Secretion of Milk in the Breasts of an Infant	204	Medicated Subcutaneous Injections	214
CLINICAL LECTURE.		Forcible Extension of the Knee-Joint—Appearance on Post-Mortem Examination	214
Practical Clinical Remarks on Lithotripsy	205	The Ophthalmoscope in Cases of Suspected Malingering	214
MEDICAL NEWS.		Mr. Syme and American Surgery	215
<i>Domestic Intelligence.</i> —Death from Chloroform	208	The Physical Phenomena of Revivals	216
HABERSHON, DISEASES OF THE ALIMENTARY CANAL, 4 PAGES.		The Cholera in Germany	216
		Cholera	216
		Cholera at Bombay	216
		New Professor of Physiology of Paris	216
		Poisoning Through Eating Potato Seeds	216

GULSTONIAN LECTURES.

On Fever and Inflammation. Delivered before the Royal College of Physicians, London, 1859. By WILLIAM ADDISON, M. D., F. R. S., F. R. C. P.

LECTURE II.

IX. *Fever.*—When a person is inoculated with the virus of smallpox, a poison is introduced into the body—nay, into the blood. That it distempers the blood, is concluded from the generality of the symptoms.

These are, rigors and shivers over the whole body; to which succeed a fever, hot skin, quick pulse, and general illness, accompanied with severe pain in the back and head, inclination to vomit, pain on light pressure at the pit of the stomach, stupor, and drowsiness.

Counting from the first invasion of the fever, the pustules of smallpox arise on the fourth day, rarely sooner. At first very

small, they grow greater every day, and rise more and more to a head filled with pus. About the eighth day, the spaces between the pustules look red, and the hands and face swell. On the eleventh day, the swellings are evidently going down, and the pustules have reached their full magnitude. At this time, the fever has greatly diminished or wholly vanished.

Matter taken from any of the pustules will reproduce the fever with certainty in a person who has never had it. The virus, therefore, has been multiplied a myriad-fold—regenerated in the body of the patient. And the question proposed is: To what element of the tissues or of the blood is the reproduction of the virus to be attributed? The pustules do not make their appearance until some days after the fever; excluding them, therefore, from any share in *generating* the virus, the plasma and the corpuscles of the blood remain for examination.

Published monthly by BLANCHARD & LEA, Philad'a, for One Dollar a year; also, furnished GRATUITOUSLY to all subscribers of the "American Journal of the Medical Sciences," who remit the Annual Subscription, Five Dollars, in advance, in which case both periodicals are sent by mail free of postage.

✂ In no case is this periodical sent unless the subscription is paid in advance.

Liebig, it is well known, ascribes the phenomena which succeed the introduction of the smallpox virus into the blood to a process exactly resembling fermentation. Yeast, he says, is putrefying gluten, and its component particles are therefore in a state of intestine motion or transformation. And he lays down the proposition—that a substance in the act of decomposition, added to a mixed fluid in which its constituents are contained, can reproduce itself in that fluid exactly in the same manner as new yeast is produced when yeast is added to liquids containing sugar and gluten.

Thus the virus of smallpox, which virus is formed out of blood, causes such a change in blood as gives rise to the reproduction of the virus from the constituents of that fluid; and the transformation is not arrested until all the particles of the blood which are susceptible of the decomposition have undergone the metamorphosis.

Admirable as this teaching is, there is another view of the matter. Naturalists insist that yeast is a growing plant; and physiologists insist that changes in a medium in which living bodies grow, are to be referred to other laws than those of ordinary chemical affinity.

In the January number of the *Quarterly Review*, for the present year, the writer of the article "On Bread," says:—"The yeast-plant represents one condition of a species of fungus remarkable for its wide distribution and the magnitude of its effects. The forms in which it is familiar to most persons, are yeast, the vinegar-plant, and the common blue mould which occurs on sour paste. Yeast and the vinegar-plant are the forms in which it vegetates under various circumstances, when well supplied with food. Mildew or mould is its fruit. The yeast plant," he goes on to say, "is a wasteful feeder. Not only does it decompose so much of the liquid as it requires for its own nutrition, but it produces a similar decomposition in the liquid around it; and this *contact action* is at present a stumbling block to natural philosophers, many of whom are earnestly endeavouring to surmount it. The chemist refers it to the same unexplained force by which inorganic substances cause the combination or separation of substances, without themselves undergoing alteration; as when spongy platinum causes a mixture of oxygen and hydrogen gases to unite and form water."

Many thoughtful and learned men have protested against the prevalent tendency to explain all vital phenomena by physical and chemical laws only, without regard to the order of conceptions specially belonging to vital phenomena. However this may be, the multiplication or increase of a contagious virus—such as that of smallpox in the blood of a living person, its discharge by the pustules of the skin, and the patient's recovery from it—may *a priori* be assumed to be something more than a simple physical fact.

But let us state the argument, from which we shall conclude that—

X. *The Virus of Smallpox is generated by Abnormal Metamorphosis or Disease of the Corpuscles of the Blood.*—It has been established by unquestioned microscopical observations, that the qualities and secretions of an organ are aggregates of the qualities and secretions of the minute cells which compose it. In vegetable structures, the qualities of the leaf are produced by, and reside in, the cells of the parenchyma of the leaf. The colours of petals and the qualities of fruits are aggregates of the qualities or properties of the cells composing these parts.

In animal bodies, the qualities and secretions of the liver, skin, and kidneys, are known to be produced in the cells or particles composing the parenchyma of these organs. In all cases that are known of the generation of poisons in a living body, the poison is a product of cell-metamorphosis. It is so in vegetable bodies—instanced by opium, strychnia, belladonna, etc.; the properties of the juice of the poppy and of other plants being generated in the cells of the plant. So also in animal bodies; the poisons of wasps, bees, and serpents, are generated by the metamorphosis of cellular bodies.

Analogously of blood, we have shown that some of its most prominent and important qualities are qualities of its corpuscles, of the cellular bodies floating in it. And we have discussed the physiological production of matter in the blood corpuscles of the human body which is poisonous to the brain, namely, the matter of venous blood. When, therefore, as in smallpox, blood becomes the seat of a contagious poison which has been generated in it, there is a strong inducement to interpret the pathological fact by reference to physiological laws and phenomena.

And this consideration has much more weight than might at first appear; if we find contagious fevers arise from exposure of the blood to miasms in the atmosphere, that the infection is received during respiration, and through the lungs, where we have actual proof that the corpuscles are naturally changed in properties and colour; and if not so changed, that they carry within them a poison through the body which disturbs the functions of the brain.

It seems opposed to all reason to infer that the smallpox virus, a matter of definite quality and action, often generated in the blood in very large quantities in a few days, should be referred to the plasma, a fluid of variable composition, when all analogy bases it in the corpuscles.

Upon these grounds, we put forth the following physiological interpretation of the phenomena which succeed the introduction of the smallpox poison into the blood by inoculation. The corpuscles of the blood, passing in the vessels at the moment these are wounded and opened by the instrument which introduces the virus, are the first affected by it; and from them the rest of the corpuscles are infected by contagion, or contact action. The spreading of disorder from corpuscle to corpuscle throughout the blood, is denoted by the fever, which rises daily greater and greater, until inflammation and pustulation are established.

The physiological demand is here deemed analogous to that where abscess and ulceration is established for the expulsion of a thorn or a slough. That is to say—in thorns, sloughs, and necrosis of bone, the demand is for the expulsion of an injurious body from the solid texture (the common tissue). In smallpox and other fevers, the demand is for the expulsion of some hurtful matter from the plasma of the blood. In both examples, forms of inflammation are the phenomena.

Life is a state of constant antagonism to the forms of dead matter; and any injury or decomposing tendency excites reaction. The corpuscles of blood, infected with a contagious poison, therefore, react against it; they excrete, throw off, or free themselves from the virus, and their countless multitude gives quantity to the products. The prosecution of the virus then devolves upon the plasma; and in smallpox, inflammation and pustulation in the common tissue of the skin is established for its final expulsion and the patient's recovery.

It is of no consequence to our interpretation of the reproduction of the virus of smallpox, how the rival claims of chemistry and physiology are disposed of; for, whether the contagion does spread through the blood from particle to particle in the manner of a chemical ferment, or whether from corpuscle to corpuscle as from one living body to another—whichever form of words or ideas is chosen, the proposition that the corpuscles are the particles of the blood through which the poison operates is agreeable with, or remains unshaken by the acceptance of either explanation. But, whatever be the order of our conceptions as relates to the regeneration of contagious poisons in the blood, whether chemical or vital, the same ought to be carried out in its consequences. Therefore, if the origin of the smallpox poison be referred to a chemical ferment, the origin of other poisons in plants and animals ought also to be referred to chemical action. Should this be done we may truly dismiss vital action and vital conceptions altogether from the scene. Are we yet prepared to go these lengths? Much consideration, we think, is demanded before an affirmative answer be given.

The assumptions necessitated upon either view of the phenomena of smallpox disease may be considered as in favour of the physiologist. On the one hand, by the chemical philosopher it is assumed that yeast is decomposing gluten; that the growth of yeast is a progress in decay; that the smallpox virus is in a state of intestine motion, and that this commotion is communicated to some unknown particle or ingredient in the blood. On the other hand, the physiologist does no more than state that yeast is a living plant; that the corpuscles of blood are living organisms with the properties of other cellular bodies, namely, growth and metamorphosis, and that some of them, infected by injurious matter imbibed from the air or otherwise introduced into the blood, communicate disorder to the rest by contagion, or contact-action. Of these two interpretations, the chemical one is unsatisfactory, because it breaks up all our ideas of peculiarities in living bodies; it leaves unexplained numerous other examples of contact-action in physiology, and it refers indefinitely to particles in the blood, without distinction between the plasma and the corpuscles; whereas, we point specifically to bodies floating in the fluid of the blood

of the same class or kind with other bodies which are known to generate poisons, both in animal and vegetable structures, and which, moreover, in the human structure, do unquestionably generate and contain the matter or poison of venous blood. Lastly, there seems a preponderance in favour of the interpretation which bases the phenomena of smallpox fever upon the corpuscles of the blood rather than on the plasma; because, as we have said, in all instances known of the generation of poisons in living bodies, animal or vegetable, the production of the poison is a function of analogous bodies.

The regeneration of a contagious virus in the blood and symptoms of fever go together; therefore, if the production of the virus be rightly ascribed to abnormal metamorphosis of the corpuscles, phenomena of fever must be based upon the corpuscles. It is to be examined, therefore, by what facts we support this more general conclusion.

Gout is a disorder attributed to altered qualities of the blood. Yet it forms a strong contrast with smallpox and other fevers; and from this contrast the suggestion arises, that if in either of the two diseases, gout or smallpox, the *materies morbi* can be fairly allocated to one part of the blood, the place of the other will have been found.

Now the close dependence of the plasma upon articles of diet, and the argument that the plasma may become distempered without necessarily involving the corpuscles, have been discussed. Gout is a disorder substantiating the argument. For its access is promoted in a very remarkable manner by a full and luxurious mode of living; and the more surely, if this be conjoined with a sedentary and inactive habit, which is known to produce inactivity in the depurating organs. The attack commonly comes on without previous warning. The person goes to bed and to sleep, thinking himself in his usual health, and is awakened in the middle of the night with pain and inflammation in one of his feet. If there be any previous indications of the approaching attack, they are referable to the digestive and depurating organs; such as diminished and high coloured urine, diminished appetite, flatulency, and, perhaps, some slight diarrhoea, or its opposite constipation.

In gout, inflammation is the primary and diagnostic phenomenon. That it is a de-

purative action is shown by the result. There is no fever. A *materia morbi* is deposited at the place of inflammation; but this is not contagious. By proper medical treatment the natural depurating organs—the skin, bowels, and kidneys—may be stimulated to assist in removing the offending matter from the blood, so that the inflammatory reaction may be either shortened, mitigated, or altogether extinguished.

In contrast with this sketch of the phenomena in gout, contagious fevers arise in a different way; not through errors in diet, but from poisonous substances inhaled by the lungs or ingrafted into the blood. Symptoms of fever are primary features of the disorder. A contagious virus is generated in the blood, and inflammation is consecutive or secondary, following after symptoms of fever, because the plasma is distempered, not primarily, as it is by errors in diet, but consecutively, through the excretions of the previously diseased corpuscles.

These statements, we apprehend, contain the ground of distinction between erysipelas, as a local inflammation, and erysipelatous fever; rheumatism and rheumatic fever. In the local inflammations without fever, the plasma only; in the fevers, both corpuscles and plasma are disordered.

As this is an important point of our subject let us recapitulate the facts:—

Diet replenishes the plasma; and the plasma is the part of the blood from which elements of repair and inflammation are taken. Unwholesomeness of diet disorders the qualities of the plasma, and produces gout, an acute inflammation without fever; and morbid matter from the plasma is deposited at the place of inflammation. There are other inflammations where evidence of a depurative action upon the fluid of the blood appears.

Air acts directly on the corpuscles of the blood, which are bodies with the properties of cells. From substances in the air fever arises; and in fever a contagious poison is generated in the blood. The corpuscles of the blood naturally contain within them the matter of venous blood, which is poisonous to the brain. And in other instances—in vegetable and animal structures—bodies, analogous to the blood-corpuscles, are the organisms in which poisons are produced.

From these facts, we draw the general conclusion that abnormal metamorphosis, or

disease of the corpuscles of blood, is the antecedent of fever; and distemperature of the plasma the antecedent of inflammation.

XI. Inflammation as a Therapeutical or Depurative Reaction, in Cases of Fever.

In some fevers, or in some cases of fever, the natural depurating organs are sufficient; or, by proper medical treatment, they may be roused to a sufficiency for the elimination and discharge of the morbid matter made over to the plasma from the diseased corpuscles. If this can be accomplished, there will be no call or necessity for any preternatural depurative reaction between the plasma and the common tissue. In such case, therefore, the person has, and must go through, the fever; that is to say, the blood corpuscles must pass through the phases of their disorder; but he is saved, by judicious medical treatment, from a local inflammation, because distemperature of the plasma, consequent upon disorder of the corpuscles, is met and relieved by the natural working of the depurating organs. These organs act upon the plasma; and inflammation is an action between the plasma and the vessels. By one or the other, or by both ways, the fluid of the blood may be relieved of hurtful matter; and, as the severity and duration of symptoms of fever are a measure of the severity and duration of disorder in the corpuscles, so, we apprehend, the severity and duration of the consecutive inflammations are a measure of ease or difficulty with which the morbid matter separates, or sloughs off, from the rest of the fluid, and is made over to the common tissue for discharge. But, in cases of fever, we apprehend that neither the natural organs nor inflammation can effect this depurative purpose, so long as disorder is limited to the corpuscles.

The *materies morbi* of the corpuscles—of whatsoever nature this may be—must leave them, and be discharged into the plasma, before any depurative means can come into play for the final expulsion of it from the fluid of the blood. This appears to be the *rationale* of our inability, by any means which have hitherto been tried, to cut short the progress of a fever.

The argument respecting the therapeutical properties of inflammation in distemperatures of the fluid of the blood was partially discussed in the first lecture; and we now proceed with what further we have to say on this subject.

CASE.—At 8 o'clock in the morning of Dec. 28th, a physician, who was assisting at the *post-mortem* inspection of the body of a lady who had died of puerperal peritonitis, unfortunately pricked his finger. Twelve hours afterwards, he felt some pain at the part; and he had it touched with nitrate of silver. During the night, shiverings came on, and he felt extremely restless. On the morning of the 29th—the next day—the finger was swollen, and red lines extended up the arm. In the evening of that day, the symptoms were not abated, and there was great prostration. On the 30th, the hand and arm were greatly swollen, the glands in the axilla were affected, and the pain was very great. On the 31st, the pulse beat from 90 to 100 in the minute; and the breathing was heavy and irregular, with torpor and drowsiness. In the evening, all the symptoms were increasing; and now an erysipelatous blush from the axilla extended over the side of the chest. During the night, the breathing became difficult, and the drowsiness passed gradually into deep stupor. Death took place at six o'clock in the morning of January 1st, not quite four days from the infliction of the wound.

In this case, the phenomena, in all important respects, are similar to those observed in traumatic erysipelatous fever, and in puerperal fever. The circumstance of the disease arising in the manner related—namely, from inoculation of a poison from the body of another person who had had puerperal fever—establishes the relation between it and the contagious fevers, and shows that the fatal termination in so short a period is to be attributed, not to inflammation, but to disease of the blood. If this be assented to, the case is taken out of the category of inflammatory diseases, and is placed in that of blood diseases.

But if this and analogous cases—if erysipelatous fever, puerperal fever, gout, small-pox, and the other exanthematous fevers—be considered as blood diseases, a great step indeed will have been taken, in the direction we are arguing, towards removing inflammatory reactions altogether from the pathological list; and a wide avenue is opened for a reconsideration of their true import.

Moreover, much doubt is thrown upon the value of the labours of the pathological anatomist, who may regard effects left by internal inflammation in fatal cases of blood-

poisoning as showing anything whatever of the nature or seat of the disease. For the question arises, whether inflammation, and the suppurations which may appear in contagious fevers, are not appropriately placed in the same class with inflammation and suppuration in smallpox, sloughing carbuncle, and necrosis of bone; all of which are indisputably therapeutical reactions, the only difference being that, in the one class of cases, the actions arise for therapeutical purposes in the solid parts—the common tissue; in the other, for therapeutical purposes having reference to the fluid of the blood.

If we impartially review phenomena of inflammation as a matter of natural history, and begin with the simplest cases—scalds, burns, sloughs, and fractures (injuries to the common tissue), and boils, eruptions, gout, and smallpox (from injury to the qualities of blood)—we can scarcely fail of perceiving, in both classes, that the forms and amount of the action depend upon, or are governed by, the amount or extent of injury sustained. And, if hindrances protract the process of repair, so also analogous difficulties protract depurative forms of inflammation. If keeping peas in a sore protracts granulation and discharge, so also perseverance in unwholesome articles of food will protract ulceration. In mechanical injuries, the cause of the injury (the heel of the horse, or the cart-wheel), the part injured (the torn flesh, or the broken bone), the extent and nature of the hurt (contusion, laceration, and comminution)—all these, and also the subsequent reaction (the process of repair), are objects either of sight or of touch, or of both. On the other hand, in injuries to the blood, all these things are, and, to a great extent, must remain, matters of reasoning and deduction. We have said, that very little can be demonstrated of the vital and depurating processes constantly going forward in the blood of the living person. In the engrafted smallpox, it is true, the poisonous matter introduced into the blood, and the consequent inflammation and suppuration in the skin, are seen; but the essential part injured—the elements of the blood—the extent of their injury, and the depurative reactions going on amongst them, and which connect the introduction of the virus with the fever, and the subsequent inflammation and suppuration, are not seen. Likewise, in the fatal case just related, there was

evidence of the introduction of poisonous matter into the blood through the wound of the finger; but the rapidity with which it spread throughout, and destroyed the normal quality of the blood, was only to be proved by the rapid course of the symptoms and the fatal termination. In this case, we argue that the inflammation and swelling of the glands in the axilla were reactionary efforts to arrest the course and eliminate morbid matter, though they failed; and they failed upon the same ground that similar efforts fail in cases of severe mechanical injury; namely, because the injury inflicted on the blood was so great that life succumbed before measures of relief could come effectually into play. In severe mechanical injuries, persons sometimes die before, or soon after, a process of repair is established; so likewise, in injuries to the blood, persons will die before any inflammation appears.

XII. *Diseases of the Corpuscles of Blood.*

—With respect to disease or abnormal metamorphosis of the corpuscles of the blood, and its association with symptoms of fever, numerous observers have described their darker colour, and the easy transudation of their colouring matter in typhus. Denis, for example, describes the blood in typhus fever as deficient in fibrin. He says that air had no effect in reddening it: and, on analysis, it was found to contain ammonia. Dr. Armstrong observed the blood in typhus from the temporal artery as dark as that from the veins.

The general appearance of blood in malignant fevers has been described by Huxham and Fordyce. At the first commencement of symptoms of fever, the blood was sometimes buffed; but the clot beneath was always of a loose texture, scarcely cohering, and very dark in colour. If the patient was bled two or three days after the onset of fever, the blood was found incoagulable, having the appearance as when spirits of hartshorn is added to blood as it runs from the vein, which darkens its colour, and prevents coagulation.

In the yellow fever of the West Indies, blood has been observed to be hotter than in health. As a fever progresses, it becomes black and thin. Dr. Blair says that, in many instances the corpuscles were found so much dissolved that, in several specimens of fever-blood, but few of them could be observed.

It has been found that a diminished amount of carbonic acid is discharged from the blood by respiration in cases of fever; and this fact, taken in conjunction with the dark colour of blood, is conclusive as to one, at least, of the functions of the corpuscles being disordered in fever.

Rokitansky, Simon, Perry, and many other accurate observers, all speak of the dark colour and changed state of the corpuscles of blood in malignant fever, of the incoagulability of the plasma, and of the staining of the tissues and of the serum by the colouring matter which transudes the corpuscles.

As regards the microscopical appearances of the corpuscles of blood in fever, we hesitate at present to lay any stress upon them; because in persons in health, they very speedily change their figure and outline in a very uncertain manner. Some of them become notched with projecting points, and otherwise changed in outline; others assume globular forms; they are influenced as respects these changes, it would appear, by the temperature of the glass upon which they are received for examination, and by the way in which they are covered by the thin glass. Some are seen paler, and some smaller than others; some adhere closely together in rolls, others float about separately without the least disposition to adhere to their neighbors. All these varieties may be seen in the same small quantity of blood which is alone available for microscopical inspection, especially if the exterior edges of the film of blood be brought into the focus of the microscope.

Notwithstanding these obstacles to the drawing any positive conclusion from the microscopical appearances of the blood-corpuscles in cases of fever, it is quite as likely to be by the microscope as by chemistry that future advances in the pathology of these bodies will be made. For how can any bulky chemical manipulation satisfactorily eliminate results from the plasma from results from the corpuscles? especially if, under the influence of reagents, as we shall show, they throw out matter from their interior into the fluid in which they swim, and yet preserve their integrity or individuality. "Hitherto, at all events," as Rokitansky has well observed, "chemistry cannot be said to have excelled, as respects the pathology of these bodies, the achievements of a circumspect anatomical

survey, notwithstanding the limited resources at the disposal of the latter.

Experiment 1.—Take a slip of glass, such as is used for mounting microscopical objects, receive on it a very small drop of blood, and place close to it with a pipette a drop of any fluid, chloroform, ale, weak sugar and water, etc., and the quantity of the extraneous fluid should not exceed the quantity of blood. Upon now dropping on the two fluids a thin piece of glass, their nearest edges will mingle, but in various proportions.

In these experiments we find the *outline* and the *interior* of the corpuscles of extremely various appearances in the same experiment, but nothing appears thrown out from them.

Experiment 2.—Proceed as in the last experiment, but let the fluid used be sherry wine. The corpuscles, along the line where the blood and wine mingle, will soon begin to throw out molecules around their circumference, many of which pass away into the fluid; others grow out into long tails, which remain attached to the corpuscles, and terminate in a knob. They also wave about in a very singular manner. After some time (half an hour), the tails or filaments become nodulated, and then break away from the corpuscles, and when they have done so, they continue their singular movements in the fluid.

Some years ago, when making observations on the plasma or liquor sanguinis of blood, drawn by venesection in cases of fever and inflammation, we observed in the fluid a vast multitude of minute molecules. (*Medical Gazette*, vol. ii., 1841-42.) And the molecules seen in the experiment here related, are precisely the same in magnitude and appearance as those we saw in the fluid of blood drawn in the cases of fever. Now we believe that the blood-corpuscles do not immediately lose their vital or chemical properties when withdrawn from the body. Therefore, we regard the remarkable forms and actions they exhibit under the influence of sherry wine, as phenomena of a species of reaction, which, amongst multitudes of them, is various or unequal, hence the various appearances presented. In some, the resistance offered to the extraneous fluid is more easily overcome than in others.

We have frequently examined with the microscope blood taken from persons affected with scarlet fever, with reference to

the appearances in the plasma, and have always noticed the following facts. The colourless or plasma corpuscles are much more numerous than in persons in health, and especially so if the blood be drawn from the skin as the fever is passing off and the epidermis beginning to exfoliate. They are of different sizes and present different appearances. In the open spaces between the rolls of the red corpuscles, irregular masses of granular matter and numerous free molecules are seen floating in the fluid.

In cases of diphtheria, we find that the plasma presents the same appearances as are seen in scarlet fever. Formerly we supposed the free molecules observed in the plasma of blood, drawn in cases of fever and inflammation, to be derived from the colourless corpuscles; but now that we have seen them thrown out by the red corpuscles, there is actual proof that these corpuscles, in their reactions upon extraneous substances, do themselves throw off matter into the fluid in which they swim. The appearances, then, which we have seen in the fluid of the blood in cases of fever, and the behaviour of the corpuscles in the experiment we have related, appear to corroborate our conclusions respecting the excretions of the corpuscles passing into the plasma, and the association of these excretions with phenomena of fever.

Before proceeding with our argument, it will be convenient now to refer to some collateral incidents which require our notice.

First, it may be objected to our proposition respecting the antecedent of fever, namely, disorder or disease of the blood-corpuscles, that in venosity of blood, where a poisonous element of the corpuscles fails of being discharged by respiration, the symptoms are those of brain disturbance, and not of fever. In *morbus caruleus* there is no fever necessarily.

To this objection it may be replied, that the presence of a venous quality in the corpuscles does not imply disorder or disease in them, in the same way that it is concluded to arise from miasma in the air. The substance—carbon or other matter—which gives to the corpuscles their venous character, is a substance natural to them, an essential ingredient of their composition in certain parts of their course in the circulation. Therefore, it is to be expected, it would occasion no unusual reaction on the part of the corpuscles themselves, though

the brain suffers; whereas, a poison from the air may be presumed something quite heterologous to the corpuscles, and doubtless they react with more energy against a foreign injurious matter, than against anything which is a part of their normal composition.

In cases of blood-poisoning through the stomach, such as drunkenness from alcohol, narcotism from opium, and salivation from mercury, the locality and character of the symptoms point out which organ it is that suffers first or most from a particular poison diffused through the plasma. And if in these examples fever be absent, the argument is, that the parenchymatous organ is affected before the corpuscles of the blood, fever appearing when they partake of the disorder.

In cases of blood-poisoning through the lungs, on the contrary, the symptoms begin with fever, and the argument is, that the corpuscles of blood are here affected first, before the plasma or any of the local parenchymata; fever denoting an abnormal metamorphosis of the corpuscles.

A venous state of the corpuscles of blood is not an abnormal metamorphosis. The condition comprehended in the term venous is one natural to them. Misplaced venous corpuscles disorder the brain; but fever does not appear, because the venous state is natural to the corpuscles. The absence of symptoms of fever, when venous blood circulates arterially, is therefore no valid objection to the proposition we are arguing.

Again, we have hitherto purposely abstained from any reference to the brain or nervous system as causes of fever and inflammation, not because we underrate their powerful influence over blood and the secretions, but because so important a part of our subject requires a special consideration, which we can here but briefly indicate.

It has been argued in the former lecture, that the elements of the parenchymatous organs and the corpuscles of blood have the common properties of other living cellular bodies; and among these are properties of affinity, which differ in relation to different substances. And there can be no doubt that the corpuscles of the blood, as respects the various substances they encounter in their course during circulation have much more intimate relations with (or a greater affinity for) some than others. For example, in the lung, a special reciprocal action takes

place between the corpuscles which are within the vessels and the air which is outside them. And, as if to facilitate this action, the coats of the bloodvessels in the cells of the lung are reduced to an extreme degree of thinness.

Now, it may be argued of any other special organ, where the coats of the capillary vessels are reduced to a still greater degree of thinness than in the lung, that they are so for a similar purpose. Thus, in the brain, an organ very largely supplied with blood, the coats of the extreme vessels are so thin that we fail to trace them in all their various ramifications; indeed, so entirely are they altered that the elements of the organ have but a slight coherency. And, unless the contrary can be shown, we may infer this disappearance of the ordinary properties of bloodvessels to be for the purpose of removing all obstacle to the closest possible contact between the corpuscles of the blood and the parenchyma of the brain. This inference is corroborated by the fact that the brain is the organ specially affected by an abnormal circulation of venous corpuscles. That is to say, the brain is the organ which first detects the presence of an abnormal venous quality in the corpuscles.

If, then, we may regard the thinning away of the coats of the capillaries of the brain as facilitating a contact action between the corpuscles of blood and the substance of the brain; and if, moreover, we are able to appeal to the known effect of venous corpuscles upon the functions of the brain denoted by drowsiness, stupor, delirium, and coma, as proof of a special action between the brain and the corpuscles, then we may claim the constant occurrence of similar cerebral disturbances in fever as corroborative of the view which bases phenomena of fever upon abnormal metamorphosis of the corpuscles of blood; the brain—to use a chemical phrase—being the test of the condition of the corpuscles.

All the functions of a living body may be comprehended as a series of actions and reactions; and, if it be admitted that the corpuscles of blood do perform a special function in the brain, there must necessarily be reaction from the brain upon the corpuscles.

CASE.—A young married woman, aged 19, was delivered of her first child. The labour was natural, and she went on

favourably until the fourth day from her confinement, when her husband stayed out late at night, and returned home drunk from a fair, very much knocked about. By this she was thrown into a state of great nervous excitement. Very shortly after, she was seized with a numbness of the legs and shivering, and then with pain in the head and wandering of the mind. The secretion of milk was interrupted; the skin became hot and dry; no sleep could be procured; and the pulse beat 120 in the minute. The wandering of the mind passed into furious delirium, and all the symptoms of fever and excitement continued for several days. It was only by judicious medical treatment and careful nursing that the disorder was subdued on the seventeenth day.

In this case, we argue that the fever arose, not immediately from the nervous shock, but from disorder of the blood-corpuscles; and, as our researches have led us to interpose distemperatures of the fluid of the blood between errors in diet and inflammation, and disorder of the corpuscles of blood between aerial miasms and fever, so analogously of mental emotions and nervous shocks, when they occasion or aggravate fever or inflammation, we conclude they do so by disordering, or adding to the disorder, of one or other, or both parts of the blood. Errors in diet do not produce inflammation, unless the fluid of the blood be distempered; also a miasmatic air does not produce fever, except the blood-corpuscles be affected; so, too, great convulsions and loss of consciousness (in epilepsy, etc.) pass away without fever, if the blood be not affected. The close sympathy between states of the corpuscles of blood and the brain, then, supports our proposition that symptoms of fever and the generation of poisons in the blood are to be based upon disorder of the corpuscles.

XIII. Two Species of Fever.—In the last lecture, we said that the corpuscles of the blood derive materials of their growth and nourishment from two sources, namely, the atmosphere and the plasma; and that their excretions are discharged in two ways—partly into the atmosphere, as carbonic acid, and partly into the plasma. It follows necessarily that the blood-corpuscles may be disordered in two ways; namely, by injurious matter in the air, and by injurious matter in the plasma. Wherefore, if fever be the expression of disorder in the corpus-

cles of the blood, we should expect—because they may be injured in two ways—two forms of fever. And there are two forms of fever, designated respectively contagious and hectic fever. Having discussed the phenomena of contagious fever, we have now to speak of hectic fever.

The corpuscles of the blood, in common with other cellular bodies, have within certain limits a power of resistance against injurious agents. It is not every passing impurity of the atmosphere, nor every injurious change of quality of the plasma, that establishes symptoms of fever. Nevertheless, poisonous substances in the air do, we know, occasion contagious fever; and we propose to show that a sufficient debasement of the qualities of the plasma, by dis-ordering the corpuscles, will produce hectic fever.

In necrosis of bone, it has been shown for what purpose inflammation arises; and why it fails, or is hindered of cure. The persistence of the hindering cause—the dead bone—gives chronicity or permanence to suppuration, ulceration, and fistulous openings in the flesh. It is notorious in these cases, and in the analogous ones of diseased joints, that hectic fever sooner or later appears; and the sooner, if the person with his permanent source of illness (the chronic suppuration), be also exposed to privations, hardships, or unwholesomeness of food. Again, in pulmonary consumption, where the blood is continually passing and repassing numerous places of suppuration, hectic fever appears. Numerous other examples might be given; but these are sufficient to show that protracted forms of inflammation—namely, chronic suppurations and ulcerations—are in some way antecedents of hectic fever. Now, when inflammation, suppuration, and ulceration are hindered and protracted, spoiled material from the places of suppuration may ebb back by the roots of the veins into the plasma.

In proof of this, we may refer to the great work of Rokitanesky, his *Pathological Anatomy*; and we shall quote the thirtieth experiment related in the third series of our own experimental researches.

“Experiment 30.—Select a small light coloured frog, with as few pigment spots as possible, because these obscure what is going on in the vessels. Irritate the web of one of the feet by immersion in tepid water (97° Fahr.) for thirty seconds, and after-

wards gently scratch it with the point of a needle, taking care not to wound or open any of the bloodvessels. At the expiration of an hour or two, upon examining with a microscope, several of the capillaries and small veins will be seen crowded with colourless corpuscles. Now let a weak solution of potash—one part of the alkali to three of water—be lightly brushed over the web with a camel's hair pencil, immersing the foot in cold water immediately after. In bloodvessels thus treated, we have seen red corpuscles glued together, and lumps of colourless matter passing away from the sphere of irritation along the widening channels of the small veins. Or these morbid matters, becoming stationary, have been the means of dividing the current of the blood into two streamlets within the vessels.”

Such an experiment as this proves that local changes in the qualities of blood may be produced in places of irritation; and if in places of irritation, then also in places of inflammation and suppuration. And it shows, we think, in a satisfactory manner, how the mass of the plasma may become distempered by any continual ebbing back of spoiled material from places of protracted suppuration.

No one can doubt that the fluid of the blood is altered, and may be distempered, by unwholesomeness of diet, and by neglect of the daily excretions by the skin, bowels, and kidneys. It is also evident that these common sources of distemperature of the fluid of the blood must operate not only in persons in health, but also in persons who may be afflicted with chronic forms of inflammation, such as are present in necrosis of bone, in diseased joints, pulmonary consumption, etc. And if, in these last mentioned examples, distemperature of the fluid of the blood from errors in diet, or other such causes, concur with distemperature from absorption of spoiled matter from places of chronic suppuration, then there will be *deuteropathy of the plasma*, or disturbance of the qualities of the fluid of the blood from two points at the same time; namely, unwholesomeness of food and absorption of morbid matter. And it follows from the physiological relations subsisting between the corpuscles and the fluid of the blood, that an increasing debasement of the qualities of the fluid *must* at length disorder the corpuscles.

But one of the chief points we have been

arguing for, is the therapeutical relations of inflammation to the fluid of the blood. We have said that suppuration is a means whereby injurious matter is eliminated from the plasma; that granulations and pus may perform the office of a depurating organ vicariously. Now we are saying that chronic suppuration and ulceration will occasion deuteropathy of the plasma, and thereby fever. This seems an incongruity. A little consideration, however, will show that it is only seeming incongruity. Diet sustains life and health only by measure; it is pathological in excess and by deficiency. Heat or temperature contributes to life and health only by measure. Oxygen, an essential constituent of the atmosphere, is an element of health and life only by measure; any great variation from a mean amount is pathogenetic. Too much or too little would equally occasion disturbance of health.

So likewise of the matters we are discussing; the process of repair in the commonest injuries has its pathological as well as its therapeutical aspects. The reaction upon which cure depends may be too much, or too little, or too long about. Granulations may be languid, or indolent, or deficient; or they may luxuriate, and usurp the place of fibrous tissue when fibrous tissue is needed for reparation. And fibrous tissue may hold its ground when osseous tissue is demanded for cure. This is sometimes the case in fractured bones. In ordinary contusions, great swellings appear and disappear. In their appearance, matter from the plasma of the blood must have become stationary in the part. In their disappearance, this matter must have been absorbed again into the blood. There must be, therefore, in these cases, in some way or other, a ready passage for elements from the injured tissue into the fluid of the blood.

Analogously, inflammation, as a depurative reaction in distemperatures of the fluid of the blood, may be hindered and interfered with in various ways. There may be too much or too little of it; and certainly it is very often protracted by the persistence of the blood distemping causes. If, then, there be a ready passage—to and fro, as it were—between the fluid of the blood and the common tissue, it is not difficult to perceive that interference and hindrances may interrupt, or even reverse, the action in this particular.

The ordinary process of repair, then, has

a double aspect; and so, also, has inflammation. And our argument is, that protraction or chronicity in either of them introduces the liability to absorption of spoiled material, and that thus therapeutical reactions may operate retroversely and pathologically upon both parts of the blood; the fluid first, and then the corpuscles.

But, that we may give an outline of the argument as it relates to hectic fever, we take as examples necrosis of bone, gout, and scurvy; and, in contrast with these, scarlet fever.

Necrosis of bone produces inflammation. There are hindrances to the removal of the dead bone; therefore inflammation passes into protracted suppuration and ulceration. These gradually weaken the patient; they disable him from taking exercise; digestion is impaired; and the functions of the depurating organs are disturbed.

This is one source of distemperature of the plasma. Distemperature of the plasma aggravates the existing inflammation; but the antecedent—the dead bone—cannot, in the case we are contemplating, be removed. Therefore disorder must proceed, until at length, from the places of suppuration, morbid matter ebbs back into the circulation; and the plasma, thereby thoroughly disordered, reacts upon and disorders the corpuscles, and hectic fever, more or less, appears. Upon this interpretation of the sequence of events between dead bone and fever, to cure the fever the blood-corpuscles must be relieved from their disorder; to relieve them, the qualities of the plasma must be improved; to amend the qualities of the plasma, the chronic suppuration must cease; and that chronic suppuration may cease, the dead bone must be taken away. We all know that the effectual removal of the dead bone will cure the fever.

Errors in diet by excess produce distemperature of the plasma. And if the depurating organs, or some of them, fail in removing the distemperature, inflammation arises. In gout, the patient is surrounded with every comfort. The error in diet is most probably one of excess; it can, therefore, be easily interdicted; the antecedent can be readily removed; and, by medicine, the depurating organs can be stimulated to a more active working. For these reasons, distemperature of the plasma is concluded to be simple; its qualities are disordered from manageable sources, which may be

attacked and abolished before disorder is communicated to the corpuscles. Inflammation in gout is, therefore, acute, and without fever.

On the other hand, in scurvy, the errors in diet are those of deficiency or unwholesomeness, and are much more difficult to deal with, especially where persons are crowded together in unhealthy localities, or limited to camps or ships. The individuals are poor, or, from other circumstances, cannot command the necessaries of life. Therefore, forms of inflammation, which in the rich are simple and acute, are here (or in the poor) chronic, and pass on to supuration and ulceration, as in the sailors before mentioned, whose bare legs and feet were bitten by mosquitos; upon which example we observed, that, because the unwholesome diet and confinement could not be changed, therefore the bitten parts passed into chronic ulcers. And if, in persons thus situated, with forms of chronic ulceration from continued unwholesomeness of diet, or other privations, morbid matter should be continually ebbing back into the circulation from places of chronic ulceration, the elements of fever, from a double debasement of the plasma, would exist; and fever thus arising would obviously be different from fever arising through miasms in the air.

In scarlet fever, it is concluded, from premises which have been argued, that disorder of the blood begins, not with the plasma, but in the corpuscles. The illness commences, not with forms of inflammation, but with symptoms of fever. There has been no error in diet; a miasmatic air has acted on the blood; a specific poison is generated; and the plasma is distempered posteriorly to disorder of the corpuscles. But (here as in smallpox) no natural depurating organ seems adapted for the removal of the poison of scarlet fever from the plasma; therefore, inflammation arises—that is to say, reactions between the plasma and the common tissue. The forms, amount, and duration of inflammation in scarlet fever, indicate the amount and severity of the disorder of the blood. Without these reactions, the patient would die from a poison shut up in the blood; with them, in their severest forms, there is a battling for life. When a joint has been crushed, death would take place from mortification, where there no reaction; but,

this established, the patient is saved from the first and most pressing danger, though afterwards he has to pass the ordeal of inflammation, abscess, suppuration, ulceration, and very probably hectic fever too, as best he can, or suffer amputation for a chance of life. In scarlet fever, to cure the inflammation, the plasma must be freed from poisonous matter; and no more must enter it. That no more may enter it, the corpuscles must cease to generate and excrete a poison. Now, from the course observed in normal cases of an exanthematous fever, we may probably conclude that the corpuscles pass through their disorder in from four to six or eight days. When their disorder has passed, no more poisonous matter is discharged from them into the plasma; and, no more poisonous matter mingling with the plasma, the inflammatory reactions and the natural depurating organs together succeed in restoring the plasma to its natural state; whereupon, the blood regaining its normal constitution, inflammation comes to an end, and the patient is cured. The pathological and therapeutical sequences are the same as in smallpox.

In the midst of these therapeutical actions and reactions for the depuration of the blood in fever, it would seem that a depurating organ is sometimes coerced, as it were, to an increased and incongruous working; matter not naturally found in the secretion of the organ appearing in it at the crisis of the fever. In the performance of this enforced duty—the elimination of poisonous matter from the plasma—the parenchymatous elements of the organ may be overtasked and injured. Thus, in scarlet fever, the poison in the blood sometimes occasions parenchymatous disease of the kidneys; and, in such cases, there is evidence also of inflammatory reactions in the common tissue of the organ. This complication may have the same reflex effect upon the blood as chronic ulcerations. Spoiled material from the overburthened kidneys may ebb back into the circulation; and a new blood-distemper may be inaugurated from elements of urine retained in the plasma. Such being the case, there would be present the antecedent of a second or reactionary fever; namely, deuteroopathy of the plasma—that is to say, distemperature—from disease of the kidneys, superposed upon the remnant of the poison of scarlet fever. And it is in perfect accordance with the argument

that a secondary fever from disease of the kidneys should be more apt to appear as a consequent of the primary fever, where the inflammatory reactions in the skin are too slight or insufficient for the full and effectual discharge of the poison. But it is to be observed, that the second fever is not a relapse or reappearance of the first; it is another fever of different origin. The first fever was occasioned by an aerial miasm; the second is occasioned by a debasement of the plasma acting injuriously on the corpuscles of the blood.

Let us, in concluding this lecture, give a brief summary of the facts and of the arguments.

In necrosis of bone, the pathological series begins with dead bone. If this cannot be taken away, it ends with fever, from deuteropathy of the plasma disordering the corpuscles of the blood.

In pulmonary consumption, the pathological series begins with tubercles in the lung. There are hindrances and difficulties in their discharge; suppuration is made chronic; and the phenomena end with fever from deuteropathy of the plasma.

In scurvy, the series begins with unwholesomeness or deficiency in diet, or other privations which cannot be changed. Ulcerations arise; and the series may end with fever, from deuteropathy of the plasma.

In these examples—namely, hectic fevers—disorder of the blood corpuscles is posterior to a debasement of the fluid in which they swim; and forms of inflammation, protracted for longer or shorter periods, precede the fever.

On the other hand, in the contagious primary fevers, the pathological series begins with disorder of the corpuscles. It ends with forms of inflammation; because distemperature of the fluid of the blood is, in these fevers, posterior to disorder of the corpuscles. Thus we interpret the relations of fever to inflammation, and of inflammation to fever, by the difference between the two parts of the blood. The facts are, that sometimes fever precedes inflammation, sometimes forms of inflammation precede fever; because sometimes (from aerial poisons) the corpuscles are disordered before the plasma; and sometimes (from unwholesome diet, privations, and chronic ulcerations) the plasma is disordered before the corpuscles. If you accept these interpretations, the whole subject of repair, in-

flammation, and fever, presents a coherency which is worthy of your attention. Thus:—

Mechanical objects injure the common tissue; and the process of repair arises.

Errors in diet disorder the plasma; and inflammation appears.

Miasms in the air affect the corpuscles of blood; and primary fever is the result.

Both the process of repair and inflammation, from hindrances and difficulties, may pass into chronic or protracted forms of suppuration, ulceration, and discharges; whereupon, if spoiled material should enter the circulation, and, by reiteration or quantity, thoroughly debase the plasma, the corpuscles suffer, and fever appears; namely, reactionary, hectic, or a plasma fever.—*British Medical Journal*, May 14, 21, 28, 1859.

CLINICS.

HOSPITAL NOTES AND GLEANINGS.

Cases of Addison's Disease.—Two typical examples of Addison's disease have, within a few days, terminated at Guy's Hospital, and have verified the correctness of the views of the able physician whose name is now associated with this malady. Their history is brief, but clear:—

Martha M'C—, aged twenty-six years, was admitted, under Dr. Pavy's care, on the 27th of July, with well-marked melasma, extreme prostration, and weakness, which were diagnosed as resulting from supra-renal disease, as described by Dr. Addison. She had been ill only eight months, and the principal symptom complained of was general and slowly increasing weakness. She died four days after admission (31st), vomiting having commenced forty-eight hours before death. Every organ in the body was found to be sound, excepting the supra-renal capsules, which were affected with the deposit of lardaceous matter now known as characteristic of the disease. There were a few slight but old pleuritic adhesions, but not the slightest trace of lung mischief.

The second instance was in a patient about sixteen years of age, who was in the hospital three or four days under Dr. Addison's care, having been previously a patient at the Surrey Dispensary. There was universal melasma, which was, equally with the first case, diagnosed to proceed from

supra-renal disease. The symptoms of weakness and debility were so great on admission that she could not stand. Death ensued on the 21st, and at the autopsy, the only organs found affected were the supra-renal capsules, their pathological condition proving to be the same as that of those in the first patient.

Here, then, we have two well-marked and clear illustrations of a malady which, clinically, promises to be one of the most interesting in the history of medicine to the scientific physician. In the diagnosis of Addison's disease, those who look solely to finding the melasma, or bronzing of the skin, are sometimes doomed to disappointment; for increased experience proves, as stated by Dr. Wilks in his "Pathological Anatomy," that only in chronic cases is the skin discoloured—that is, in those in whom the supra renal capsules are alone affected.

Two equally undoubted instances of the same disease have very recently been placed upon record by Mr. Mackenzie Bacon, of Norwich (lately a pupil at Guy's Hospital), and Dr. Glover; the latter in the *Edinburgh Monthly Journal of Medicine*.—*Lancet*, Sept. 3, 1859.

Two Cases Illustrating the benefit of Antiphlogistic Treatment after Severe Injuries to the Lungs.—In the present period of prevailing scepticism as to the influence of many modes of treatment which held undisputed sway among the older surgeons, it is well every now and then to draw attention to unequivocal instances of prompt benefit obtained by decided measures. More especially is it so when these measures, instead of being novel, are of old established, but now somewhat waning, character.

Many of our readers may probably have noticed in the newspapers the account of a little boy who had been knocked down by one omnibus, and run over by another, and had received most severe injuries. The accident occurred in Shoreditch, and the poor little fellow was taken to Guy's Hospital, where his state appeared so hopeless, that what was believed to be his dying deposition was taken, to be produced in evidence against the drivers of the vehicles. When admitted his ribs were found to be fractured in the most frightful manner. His chest had been, as it were, pounded, and it was difficult to say which of the ribs had not been broken. He was in collapse, and

there was much emphysema of the subcutaneous cellular tissue. Of course no stethoscopic examination could be thought of. He remained very low indeed for some time, in spite of the cautious use of stimulants, and it was at the end of twenty-four hours that his evidence was taken under the circumstances above mentioned. He had expectorated a good deal of blood, but his respiration remained throughout much embarrassed. As this embarrassment of breathing was, however, accompanied by a cold skin and failing pulse, it was not thought justifiable to abstract blood. As soon, however, as there were signs of rallying, tartarized antimony in full doses was ordered. The effect of this remedy in quieting the breathing was most marked, and the boy's progress has been from that time steady and good. He is now considered out of danger.

The above case impressed all who saw it with a strong conviction that great benefit had resulted from the free use of the antimonial remedy, but the following offers evidence which will be still more convincing to the reader. It also illustrates a yet more decided adoption of antiphlogistic measures:—

A young man, aged 19, was brought into the hospital, having been run over by a cart, and having suffered an extensive fracture of the ribs on the left side. The five upper ribs were believed to be broken, and the lung was evidently wounded. There had been rather profuse hæmoptysis. The chest was ascertained to be resonant in all parts, but his state was such as altogether to preclude any detailed examination. The lungs appeared to be loaded with fluid, but the pleura did not, as far as could be made out, contain either air or blood. The chest was put up with strapping, as is usual at this hospital. Within the twelve hours following the accident the man's difficulty of breathing greatly increased, and he seemed indeed to be rapidly sinking. Still, however, the pulse had rallied, and he was not in collapse, but dying rather from pulmonary embarrassment. Under these circumstances Mr. Bryant determined to bleed him. Antimony in large doses had already been commenced. The first bleeding was at one o'clock at midnight, and was to the extent of ten ounces. It was followed by much relief, but by degrees subsequently the difficulty in breathing returned. About

noon the same day a second bleeding to the extent of fourteen ounces was practised, and with, again, the most marked benefit. Within twenty-four hours of this second bleeding the man might indeed be considered well. He could sit up in bed and talked cheerfully. The antimony had, of course, been kept up. At present the man is fast becoming convalescent, having experienced no drawback whatever.—*Ibid.*

Disease of the Shoulder Joint ; Resection of the Head of the Humerus ; Recovery.—

The shoulder-joint, as is well known, is one of those least frequently affected by inflammatory diseases. The instances consequently in which resection of the head of the humerus is required are very rarely met with. That operation, when required, has we believe, as a rule, been very successful. Whether it be that the same vital endowments which protect it from the invasions of disease also enable it rapidly to originate healing processes after injury, it is difficult to say ; but the fact is, we believe, beyond doubt that this joint is found from experience to be one of the best adapted for the practice of resections. A case in which Mr. Birkett operated in Guy's Hospital four or five years ago, did very well, as also a second of Mr. Erichsen's in University College about the same time, also one of Mr. Bickersteth's in the Liverpool Infirmary. In an interesting case in which Mr. Hutchinson about three years ago excised the head and upper fifth of the shaft of the humerus on account of a large myeloid tumour developed within the bone, notwithstanding the length of the shaft removed, a good recovery, with firm ligamentous union, followed. In this instance, however, death from recurrence of cancer in the lungs, bone, etc., occurred before the usefulness of the arm had been put to much trial. The following case has just come under our notice in Guy's Hospital :—

A healthy man, aged 24, was admitted about six weeks ago on account of disorganizing disease of the shoulder-joint. He stated that the affection had commenced as an aching in the part about twelve months previously. For this he was for some time under treatment in St. George's Hospital. After leaving that hospital an abscess formed and opened externally, and from this a sinus still remained, which opened in front just anterior to the inner edge of

the deltoid. There was great thickening of the parts about the joint, and movement was very limited. No grating could be produced by any degree of motion which the man could bear. Excision having been determined upon in consultation, Mr. Bryant performed that operation about a fortnight subsequent to the man's admission.

When, under the influence of chloroform, the arm could be freely moved, grating was easily produced, and the last shade of doubt as to the entire disorganization of the joint was thus removed. Mr. Bryant made only a single long incision down the upper aspect of the joint, and through the belly of the deltoid in a direction parallel with its fibres. This was found sufficient to allow of the exarticulation of the extremity of the bone, although the thickening of the adjacent parts rendered this manœuvre much more difficult than it is in the dead subject. The articular head having been fairly thrown out into the wound, it was sawn off from behind forwards with a Butcher's saw. Excepting a few loose shreds and some small patches still adherent, the cartilage had been wholly removed. The head of the humerus, on section, was seen to be in a state of acute inflammation. Much new bone had been found in the periosteum of the upper part of the shaft. No vessel required ligature after the completion of the operation—a somewhat remarkable circumstance, if we remember the size of the posterior circumflex. On the parts being adjusted after the operation the advantage of the single straight incision was very apparent, since the edges of the wound now came into close apposition spontaneously, and the parts involved were deeply buried. No bad symptoms followed : indeed the external wound healed almost too soon, and on the third day Mr. Bryant opened its edges a little, in order to prevent the risk of any accumulation of matter. On the eighth day the man was up, and about in the ward ; on the fourteenth he was allowed to go out in the open air.—*Med. Times and Gaz.*, Aug. 20, 1859.

Different modes of performing Lithotomy in the English Hospitals.—A large majority of English surgeons employ the ordinary lateral method of lithotomy on a curved staff. There has been, however, a considerable disposition to endeavour to improve on it of late years. The median plan, so strongly recommended by Mr. Allarton,

has been tried by not a few London Surgeons, and amongst provincial ones has found a warm advocate in Mr. Teale, of Leeds. At the London Hospital it was first adopted by Mr. Ward about two years ago, and since then has been employed by his colleagues, Mr. Critchett and Mr. Gowlan, each in a single instance. All the three patients were children, all recovered well, and in all it was considered that much less than the usual amount of bleeding took place. At Guy's Hospital, Mr. Cock has performed median lithotomy several times, and Mr. Erichsen has done the same at University College Hospital, both surgeons being, we believe, well satisfied with its results. On all hands it is considered to be best adapted for children and for small stones. At St. Bartholomew's Mr. Lloyd still continues to operate in all cases by his recto-urethral (median) method, which we described in detail when he first adopted it in 1853. He informs us that he has not yet lost a case after it, and considers it decidedly preferable to the lateral operation. His colleagues, however, without exception, we believe, always employ the latter. At the Metropolitan Free, Mr. Hutchinson always employs his rectangular catheter-staff, and considers that he obtains great advantage from it. The same instrument has been employed at King's College by Mr. Lee, but it is not, as far as we observe, in use at any other hospitals. In a recent instance in which the calculus was of large size, Mr. Hutchinson injected the bladder with oil instead of water, in the hope of facilitating the dilatation of the parts.

With regard to the median operation as advised by Mr. Allarton, it is universally admitted to be adapted only for small calculi. Now Mr. Lloyd's experience during the last few years has quite proved, that when the anterior commission of the sphincter ani is cut clean through from the perineal wound, there is no danger of the parts not healing. Might it not be well, therefore, to adopt this measure whenever, after the usual median incisions, the stone has been reached and is found too large for removal? Mr. Lloyd's operation gives abundance of room.—*Med. Times and Gaz.*, July 9, 1859.

Enormous Ranula.—At the Cancer Hospital lately, under Mr. Weeden Cooke's care, was an eccentric old woman, who has had a ranula for some years, which had

grown to the size of a large orange. When in the mouth it protruded one cheek in the most unsightly manner, and when allowed to hang out of the mouth it was like a transparent jelly-bag. She was in good health, and able to eat and talk with but slight inconvenience. Many surgeons have seen it, and wished to operate; but she steadily resisted all such interference. Not being allowed to snip out a portion of the membrane, Mr. Cooke proposed the application of potassa fusa, to make an aperture which would not close up readily; but this also she decidedly objected to.

It is very seldom that a ranula is seen larger than a walnut or pigeon's egg, because when it attains that size under the tongue it pushes this organ upwards and backwards, and sometimes most seriously interferes with both speech and deglutition. If the cyst continues to increase in Mr. Cooke's patient, it may spontaneously rupture, and partial relief be thus brought about. Such a ranula as this cannot be said to be a dilatation of Wharton's duct.—*Lancet*, Aug. 20.

Copious Secretion of Milk in the Breasts of an Infant.—The breasts of new-born infants are known to contain a small quantity of milk, which does not occasion the slightest inconvenience. Sometimes this fluid accumulates, the gland becomes swollen, and if not attended to it will give rise to inflammation and abscess. Fortunately,

this is of rare occurrence, and very little danger is to be apprehended from this temporary turgescence. A few weeks back, a male infant, four weeks old, was brought to the St. Pancras Royal Dispensary, with the presence of milk in both breasts, in such quantity as to require to be got rid of daily by gently pressing the glands towards the nipple. The mother seemed to think it was increasing instead of diminishing. A small quantity of it was examined by Dr. Gibb, who found it to possess all the characters of ordinary milk, the fat globules being plentiful, and the sugar abundant. It was even less watery than other specimens of infants' milk which he had examined. In other respects, the child's health was perfect. Brandy and lard had been locally applied to arrest the secretion. This was the mother's seventh child, and in none of the others was there any excess of lacteal secretion.

The milk was got rid of by giving mild aperients, and by removing what there was in the breasts, as that process had been commenced. It now became less and less, and no inconvenience was experienced.

An abscess in the breast of an infant is occasionally observed, as the result of over- officiousness on the part of some nurses, who make a practice of squeezing out the milk from the breasts of every child they attend, a proceeding which cannot be too strongly condemned.—*Lancet*, Aug. 20.

CLINICAL LECTURE.

Practical Clinical Remarks on Lithotomy, delivered at St. Bartholomew's Hospital. By FRÉDÉRIC C. SKEY, Esq.—Gentlemen: The larger my experience of calculous affections of the bladder, the stronger is my conviction of the well-marked superiority of the operation of crushing over that of lithotomy. This superiority is chiefly manifested in the limit it places to the greatest of all evils attendant on operative surgery—viz., danger to life. While undoubted success has attended the practice of a few eminent surgeons, so far as to influence very prominently the statistics of the operation, it cannot be denied that the element of danger yet triumphs largely in the practice of the many, to the great discredit of the operation of lithotomy. I have elsewhere expressed my belief that the operation of lithotomy had reached its highest point of excellence. I allude to the facility with which the stone is extracted from the bladder by the surgeon. But we are not to gauge the merit of an operation by the facility of its performance, or by the skill and dexterity which it may exhibit in the operator. The merit of an operation can only be estimated by the success which follows it. That operation is essentially the best which insures the more complete restoration to health of the subject of it. And here let me do justice to a recent modification of the operation of lithotomy, which I have seen performed on more than one subject by my colleague, Mr. Lloyd. It consists, as many of you are probably, aware, of a division of structures in the mesial line only. The staff being introduced into the bladder, the sphincter ani muscle is divided in front, a kind of speculum being passed into the rectum, for the purpose of render-

ing it tense. The urethra is then opened through the upper wall of the rectum, the remaining part of the canal is dilated up to the bladder by the forceps, and the stone extracted. I employed the term *dilated* because it is the term in common use, but I do not believe the urethra, especially of a child, is susceptible of such rapid, or rather sudden, dilatation, without some rupture or laceration of structure. It cannot be effected by mere stretching, by which the walls of the canal are enlarged to a circumference at least three or four times their natural magnitude. I do not mention this feature in the operation as detracting in any great degree from its merit. Dilatation of the prostatic portion of the canal has always been deemed a commendable feature in the operation, and if it be coupled with laceration, it is laceration in detail, the parts so lacerated being restored to their natural contact on the removal of the cause. I am informed by Mr. Lloyd that he has hitherto experienced no difficulty in the restoration of the functions of the sphincter muscle. The operation, to all appearance, is performed without difficulty, and the loss of blood is remarkably small.

No amount of excellence to which the operation by means of the lithotrite can be carried will ever supersede that of lithotomy—most especially, and for obvious reasons, in the case of children, in whom, fortunately, the mortality is far less than when the operation is undertaken at a more advanced period of life; also in some examples of disease in the adult. But I believe such selections should be comparatively few, and should obtain only as exceptions to a prevailing rule.

I propose now to call your attention to two cases on which I have recently operated in private. In the first of these the operation was successful, and although its progress was marked by symptoms of an untoward kind, the stone was entirely removed within twenty-seven days from the date of the first operation. The second case was unsuccessful, and on that account I give the particulars.

CASE 1.—A gentleman of forty-one years of age, stout in build, but healthy, became the subject of stone in the bladder, the signs of which might be traced back to a term of eight months. Having ascertained that he had a healthy urethra, admitting a No. 10 catheter without difficulty—that his bladder

was so far tolerant of urine as to permit its retention for three or four hours, and that the urine itself was free from morbid deposit, I broke the stone across, and withdrew the instrument. The operation occasioned so little pain that the gentleman dressed himself, and subsequently took his chair at the dinner table, at which he ate moderately, but with fair appetite. Within twenty-four hours he had passed some small fragments of lithic acid calculus, but without pain or inconvenience. On the fifth day I repeated the operation; but on this occasion, having now acquired some experience of the liabilities of the bladder, I broke the fragments by eight successive applications of the lithotrite. The pain of this second operation, although it somewhat exceeded that of the first, was by no means severe; but I directed my patient to lie in bed, and to drink largely of barley water and other diluents. On the following day he had passed a considerable quantity of detritus, the aggregate of which would have filled a large thimble. A less quantity passed on the second day, when he began to complain of pain in the bladder, and his urine deposited adhesive mucus. The pain became considerable. The adhesive mucus increased. He took mercury and chalk, with full doses of Dover's powder, night and morning, with infusion of diosma two or three times during the day. The pain subsided, and the mucus diminished in quantity; and on the eighth day, I repeated the operation, and crushed the stone nine consecutive times. Catarrh of the bladder followed as before, but he passed in the course of thirty-six hours a yet larger quantity of fragments than on the former occasion. The symptoms of what is termed chronic inflammation ran high, the mucus appeared in large quantity and was tinged with blood, appetite and sleep failed, his pulse rose to 100, and he was decidedly ill. The former treatment failed to control the symptoms, and I operated again on the sixth day. Immediately all the symptoms of internal mischief vanished; the pain subsided, the mucus diminished, his bladder became more tolerant of its contents, and he again passed detritus in a large quantity. It was now quite obvious that we had passed the ordeal of difficulty, and that the fragments of stone remaining in his bladder were very inconsiderable in quantity.

I operated again on the fourth day, and

completed the crushing, reducing every remaining fragment to a size capable of transmission along the canal of the urethra. Within forty-eight hours the bladder had entirely evacuated the whole of the calculous matter, and on carefully sounding with a variety of instruments, I was unable to detect the presence of the smallest fragment. Some months have now elapsed, and the vigilant observation of my patient fails to detect one symptom of his former disease. The stone, judging from the quantity of detritus obtained, was of moderate, not of small size. Had it been removed by means of the knife, it is highly probable that the time required for the patient's recovery would have exceeded that occupied by many days. During the progress of the treatment he cannot be said to have suffered severe pain; he was never brought within the circle of danger, and he left London with health unimpaired by surgical discipline or deprivation.

CASE 2 was that of a gentleman, sixty-two years of age; of a less healthy aspect than the subject of the last case. He had had symptoms of stone about nine months, and his health had suffered in consequence. His expression was that of a man worn by internal irritation. I ascertained the stone to be of moderate size, and its contact with the metal caused a ringing sound which was audible at a distance. On testing his urine, I found it albuminous, and postponed the operation. He was ordered diluted nitric acid in infusion of diosma, and his urine improved. In a week I introduced the lithotrite, and simply broke the stone once across. On withdrawing the instrument, and having completed the operation, Mr. — exclaimed, "What! is that all! I have had no pain whatever." He dressed himself, and returned to the society of his family. On the following day he passed one or two small fragments of stone, composed of phosphate of lime; but he continued to sustain no inconvenience from the operation.

On the fourth day I performed the second operation. On introducing the lithotrite, the bladder appeared contracted. At all events I had some difficulty in expanding the blades of the instrument, although I had thrown into the organ the quantity of water I usually inject—viz., about four ounces. However, I caught the stone, and while screwing home the blades, I per-

ceived blood flowing somewhat freely from the orifice of the urethra. This determined me to desist, and I withdrew the instrument. For some time bloody urine continued to flow from the canal; but on the second day I was summoned by his medical attendant, in consequence of an attack of retention of urine, and I drew off about a pint and a half of urine, deeply coloured with blood. Retention again followed, and I removed nearly the same quantity, and of the same character of urine, on the fourth day. The presence of the distended bladder did not appear to cause him much inconvenience, nor its evacuation much relief. Urine, more or less bloody, continued to escape from the urethra without the effort of micturition. He had no local pain, and bore pressure, both over the bladder and on the perineum, without complaint. He was ordered gallic acid in full doses. Sir Benjamin Brodie saw him at this stage, and did not augur unfavourably of my patient's case. He recommended the employment of Ruspini's styptic, and suggested the repetition of the operation as early as permissible. His increasing weakness was aggravated by the excessive action of a moderate dose of castor oil, and although the hemorrhage was reduced in quantity, his vital powers were now only sustained by the frequent employment of stimulants. Bladders of ice were applied to the epigastrium and to the perineum without effect. He became comatose, and died on the fifteenth day from the second operation.

The post-mortem examination exhibited a contracted bladder, thickened, with its inner surface coated with coagulum; a calculus of about the size and form of a moderate sized walnut, broken into three parts—its composition, oxalate of lime coated with phosphatic salts, and two lesser calculi entire; ureters dilated; kidneys diseased.

In my work on "Operative Surgery," I have referred to two or three similar cases to that of Mr. —, but they are rare. The fatal issue in this instance is not to be cited as injurious to the good name of lithotripsy. Had the old operation by the knife been substituted, the issue had, in all probability, been the same. The presence of albumen in the urine, when coupled with stone in the bladder, is not conclusive evidence of diseased kidney, and with symptoms of an urgent character we are compelled to make the effort to obtain relief. The operation of

lithotripsy, when carefully performed, creates little more pain than that of sounding for stone, and generally, in a healthy bladder, leaves as little irritation behind. The proportion of persons who suffer from complications of renal disease, coupled with calculi, is small. I do not think such cases can be safely treated by the lithotrite. Neither is the cutting operation a security against a fatal termination.

Believing as I do that the operation by means of the lithotrite is applicable to the large majority of calculous affections of the bladder—that, if well executed, it is safer as regards the life of the patient, quite as certain as regards entire recovery, and less exhausting to the system, I recommend its practice for your consideration. And as I may not have the opportunity of addressing you again for some time, I purpose concluding these remarks with some general rules which may prove useful in your future career.

I advise your rejection of cases for lithotripsy presenting the following characters:—

1. Manifest disease of the kidney.
2. The urethra so contracted as not to admit with facility a lithotrite of ample size.
3. The bladder so intolerant as to be incapable of retaining its urinous contents for three or four hours; and, on the other hand, a bladder of low nervous susceptibility.
4. Much enlargement of the prostate gland.

The quantity of water injected should not exceed four or five ounces. In many subjects, the employment of chloroform excites the bladder to contract, and the injection has to be repeated. The lithotrite, from its full size and angular form, should be introduced with more caution than is usually required on the introduction of a catheter. No attempt should be made to open the instrument in the bladder until it has been pushed thoroughly home into the organ. In the act of separating the blades, do not withdraw the upper, without at the same moment pressing the lower blade downwards towards the bottom of the bladder. If this rule be not strictly observed, the upper blade will be painfully pressed against the neck of the bladder, from which hemorrhage may follow. The stone is to be brought into the lithotrite by pressing the lower blade suddenly, and by a slight jerk or twist of the hand, against the base or bottom of the bladder. There is neither

necessity nor advantage in directing the instrument to the right or to the left. It should retain the mesial line throughout the entire operation. When the stone is caught, the blades should be screwed "home," lest small accumulations become large, and render the withdrawal of the instrument through the urethra difficult. At the first operation, do as little as possible. It may be deemed an experimental occasion, and it will be sufficient to break the stone once across. On all future occasions, the number of applications of the screw may be determined by the tolerance of the patient. The stone may be broken six, eight, or more times. The intervals between each operation will vary according to the condition of the bladder, and the quantity of detritus expelled. If the quantity be considerable, and the bladder quiet, the operation may be repeated in four or five days. The average interval is longer than this. Few cases pass through their course of treatment without giving evidence of irritability of the mucous membrane of the bladder, manifested by a discharge of tenacious mucus adhering to the bottom of the vessel. Unless in its aggravated form, it is not a serious symptom. It may be treated with diosma, or uva ursi, nitric acid, Dover's powder, &c.; but the best remedy is the lithotrite. I have repeatedly seen this symptom subside on the repetition of the operation. The constitutional treatment is chiefly dietetic. Diluents should be ordered largely; and the moderate use of wine is unobjectionable. I have never seen any advantage obtained by an abstinence diet, nor any evil arise from an ordinary and habitual one. It is surprising how large a fragment may travel along a healthy urethra. They are arrested, however, most frequently at the glans, and if a fragment cannot be extracted by a pair of fine forceps in this situation, the urethra should be divided. When fixed low down in the urethra, they should be pushed back into the bladder. This may be effected by a large catheter (No. 12), cut off straight at the point, the extremity of the instrument being supplied by a movable knob, which is withdrawn when the catheter touches the stone. The open extremity of the instrument encircles the stone, which is forced backwards without injury to the mucous membrane. A small abscess in the perineum may occasionally follow the violent employment of the lithotrite, or forceps, &c.

It presents itself under the form of a small rounded tumour. It seldom requires active treatment, and, as a general rule, may be "let alone."—*Lancet*, July 30th, 1859.

MEDICAL NEWS.

DOMESTIC INTELLIGENCE.

Death from Chloroform.—Dr. J. A. FAYETTE AVERY, of South Otselic, relates (*Buffalo Med. Journ.*, March, 1859) the following case:—

In the fall of 1850 I was requested to remove the leg of Waldo Ferris, who had been under the treatment of a quack, for an injury of the knee, which had resulted badly, rendering an amputation at the thigh indispensable. Ferris had been a strong man, and had indulged in intemperate habits, but now, at the age of forty years, was free from disease, except the injured limb. He was considerably emaciated, being much worn down by his disease, yet his appetite was good, and he smoked his pipe, and conversed freely. He was prepared for the operation when I arrived, and had an experienced dentist on hand, to administer him chloroform. I advised against its use on account of his debility, but finally yielded to the solicitations of the patient, and allowed it to be given.

He was placed upon the table, and assisted by Drs. Jaimeson and Ford, I proceeded to the business before us. Some chloroform was poured upon a silk handkerchief and applied to the patient's mouth and nose without intermission, for, as near as I could judge, a minute, when I noticed a laboured breathing on the part of the patient, and at the same time Dr. Jaimeson mentioned a partial failure of the pulse. I immediately ordered the dentist to desist with the chloroform, and gave a swallow of brandy, which improved the pulse, but still the patient breathed in a stertorous manner, and his face was congested and purple. No more chloroform was given. I hesitated a moment, and then proceeded to remove the leg and dress the stump, the patient continuing insensible, and snoring; face still of a purplish hue, and pulse feeble and frequent. We then put him in bed, and used all the means we were master of to rally him, but without avail. He died in about twenty-five

minutes from the time he first inhaled the chloroform, his face purple to the last.

The dentist was a reliable man, and he assured me that he had previously used of the same chloroform, and had found it to be good. On examining the vial containing the article, not more than two drachms were wanting, and the dentist said the vial was not full when first uncorked.

Medical Lectures in Philadelphia.—The lecture session in the medical schools of Philadelphia will commence early in the present month. The faculties in the several schools are composed of men of acknowledged abilities, and who are well able to maintain the pre-eminence which Philadelphia has so long enjoyed as a seat of medical education. Never were the opportunities for clinical instruction greater than at present, and the student who desires a thorough and complete medical education, will find all the facilities he can desire here placed within his reach.

We subjoin the list of the faculties of the three prominent schools with their terms, &c.:

University of Pennsylvania—*Medical Department.* Ninety-fourth session (1859-60).

William Gibson, M. D., Emeritus Professor of Surgery.

Samuel Jackson, M. D., Professor of Institutes of Medicine.

George B. Wood, M. D., Professor of Theory and Practice of Medicine.

Hugh L. Hodge, M. D., Professor of Obstetrics and the Diseases of Women and Children.

Joseph Carson, M. D., Professor of Materia Medica and Pharmacy.

Robert E. Rogers, M. D., Professor of Chemistry.

Joseph Leidy, M. D., Professor of Anatomy.

Henry H. Smith, M. D., Professor of Surgery.

William Hunt, M. D., Demonstrator of Anatomy.

The lectures of the session will begin on the second Monday of October, and close on the first of March.

Clinical instruction is given throughout the session, in the Medical Hall, by the Professors, and at the Pennsylvania and other hospitals.

The Dissecting Rooms, under the super-

intendence of the Professor of Anatomy and the Demonstrator, are open from the middle of September.

The room for Operative Surgery and the Application of Bandages, &c., is open early in September and throughout the Session, under the supervision of the Professor of Surgery.

Surgical Demonstrator, C. S. Bishop, M. D.

Fees.—For the Lectures (each Professor \$15) . . . \$103
Matriculation (paid once only) . . . 5
Graduation . . . 30

R. E. ROGERS, M. D.,

Dean of the Medical Faculty, University Building.

F. B. DICK, *Janitor, University Building.*

Jefferson Medical College.—The course of Lectures will commence on Monday, the 10th of October, and continue until the 1st of March.

Robert M. Huston, M. D., Emeritus Professor of Materia Medica and General Therapeutics.

Institutes of Medicine, etc., by Professor Robley Dunglison, M. D.

General, Descriptive and Surgical Anatomy, by Professor Joseph Panconst, M. D.

Obstetrics and Diseases of Women and Children, by Professor Charles D. Meigs, M. D.

Chemistry, by Professor Franklin Bache, M. D.

Institutes and Practice of Surgery, by Professor Samuel D. Gross, M. D.

Materia Medica and General Therapeutics, by Professor Thomas D. Mitchell, M. D.

Practice of Medicine, by Professor Samuel H. Dickson, M. D.

Demonstrator of Anatomy, Ellerslie Wallace, M. D.

Clinics will be held regularly during September; and every Wednesday and Saturday in October, and during the course, Medical and Surgical cases will be investigated, prescribed for, and lectured on before the class. During the year ending March the first, 1859, a vast number of medical and surgical cases were treated, and about two hundred and fifty operations were performed; amongst them many major operations—as amputation of the leg, extirpation of the upper and of the lower jaw, mamma, and eye, and six cases of lithotomy.

The lectures are so arranged as to permit

the student to attend the clinics of the Pennsylvania Hospital, and of the Philadelphia Hospital.

On and after the 1st of October, the dissecting rooms will be open, under the direction of the Professor of Anatomy and the Demonstrator.

Fees.—Matriculation, which is paid only once . . . \$ 5
To each Member of the Faculty \$15, . . . 105
Graduation . . . 30
ROBLEY DUNGLISON, M. D.,
Dean of the Faculty.

Pennsylvania College—Medical Department. Ninth Street, below Locust, Philadelphia. Session of 1859-60.

B. Howard Rand, M. D., Professor of Chemistry.

Henry Hartshorne, M. D., Professor of Practice of Medicine.

Lewis D. Harlow, M. D., Professor of Obstetrics, &c.

William S. Halsey, M. D., Professor of Surgery.

Wm. Hembel Taggart, M. D., Professor of Materia Medica.

James Aitken Meigs, M. D., Professor of Institutes of Medicine.

Wm. H. Gobrecht, M. D., Professor of Anatomy.

Theodore A. Demmé, M. D., Demonstrator of Anatomy.

The Session of 1859-60 will commence on Monday, 10th of October, and continue, without intermission, until the first of March. The Commencement for conferring Degrees will take place early in March, causing as little detention of the Graduating Class, after the close of the Lectures, as possible.

There will also be an examination of candidates for graduation, on the 1st of July; the Degree, in such cases, being conferred at the ensuing Commencement in March.

The Rooms for Practical Anatomy will be open early in September.

The College Clinic will be conducted on every Wednesday and Saturday throughout the Session.

The Register of Matriculants will be open in the College Building, early in September. The Janitor will always be present at the College, to give every necessary assistance and information (as regards board, &c.) to students, on their arrival in the city.

Fees.—Matriculation (paid once only) . . . \$ 5 00
For each Professor's ticket . . . 15 00
Graduation . . . 30 00

LEWIS HARLOW, M. D., Dean,
No. 1023 Vine below 11th Street.

Rush Medical College.—This school has been reorganized, and the following constitute the present faculty: Daniel Brainard, M. D., Professor of Surgery and Clinical Surgery; James V. Z. Blaney, M. D., Professor of Chemistry and Pharmacy; J. Adams Allen, M. D., Professor of Principles and Practice of Medicine; J. W. Freer, M. D., Professor of Surgical and Microscopical Anatomy; De Laskie Miller, M. D., Professor of Obstetrics and Diseases of Women and Children; A. S. Hudson, M. D., Professor of Physiology, Pathology and Clinical Medicine; W. B. Herrick, M. D., Emeritus Professor of Physiology and Pathology; Ephraim Ingals, M. D., Professor of Materia Medica and Medical Jurisprudence; R. L. Rea, M. D., Professor of Anatomy; Edwin Powell, M. D., Demonstrator of Anatomy.—*Annual Catalogue.*

Medical College of Alabama.—A new school, regularly chartered, has been organized in Mobile, Ala., under this title. The first course of lectures in which, will commence on the 14th of November next, and continue for four months.

The faculty is constituted as follows:—

J. C. Nott, M. D., Prof. of Surgery; J. F. Heustis, M. D., Prof. of Anatomy; Wm. H. Anderson, M. D., Prof. of Physiology and Pathology; Geo. A. Ketchum, M. D., Prof. of Principles and Practice of Medicine; F. H. Ross, M. D., Prof. of Materia Medica and Therapeutics; F. E. Gordon, M. D., Prof. of Obstetrics and Diseases of Women and Children; W. J. Taylor, of Philadelphia, Prof. of Chemistry; Goronwy Owen, M. D., Demonstrator of Anatomy.

FOREIGN INTELLIGENCE.

Death from Chloroform.—We find in the *Med. Times and Gaz.* (Aug. 20th), the following account, by Mr. W. Allingham, surgical registrar at St. Thomas's Hospital,

of a death from chloroform, which has recently occurred in that hospital.

"R. W., aged 28, admitted into Abraham's Ward, under the care of Mr. Solly. On the morning of June 14, 1859, this patient was carrying on his shoulder a basket containing bottled beer, and in the endeavour to step from one steamboat to another before they had ceased moving, he got his right foot jammed between them, and was thrown violently forward on to the deck. On his being brought to the hospital, it was found that he had dislocation of the foot inwards, and the astragalus outwards. The inferior articulating surface and the rounded head of the astragalus could be distinctly felt at the outer side of the foot; the tibia rested on the os calcis; there was no fracture of the ends of the tibia or fibula. There was considerable bruising, and the skin over the dislocated astragalus was very tense. Reduction was readily effected by simple extension. For some days he went on very well, although the foot was much swollen and contused; but he was a man of exceedingly irritable temperament, and had been accustomed to drink freely, being employed in wine-vaults. On the 24th it was evident that sloughing would take place over the outer side of the joint. On the 27th he was attacked with erysipelas, and Mr. Solly made an incision to let out pent-up matter. From this period he suffered very much; several incisions were made at different times, and a slough formed on the inner ankle from slight pressure of the Liston's splint upon which his leg had been placed. He had throughout liberal diet, plenty of stimulants, and opiates at bedtime. The erysipelatous inflammation subsided, and Mr. Solly had him taken up to the operating theatre for the purpose of examining the condition of the joint, and removing the astragalus if necessary. This was on the 23d of July. He was put under the influence of chloroform by Mr. Gervis, the house surgeon, and Mr. Solly carefully examined the joint. He did not find it necessary to remove the astragalus, but gouged away some carious bone. The limb was re-adjusted in a Liston's splint before the patient was taken from the theatre, and the whole operation lasted more than half an hour, during which time he was under chloroform.

For a few days after the operation he was better, but he soon relapsed; his sufferings

were considerable, no doubt, and much aggravated by his irritability; there was free discharge from three wounds; his rest was broken, his appetite far from good, and Mr. Solly came to the conclusion that it was advisable to amputate the foot. On the 8th of August, the day on which the operation was to take place, he was quite cheerful, and took some stout and brandy, a short time before he was taken up to the operating theatre. Mr. Gervis again administered the chloroform; one drachm was placed in the inhaler, and I should think that not more than half of it had been inhaled when Mr. Gervis found his pulse fail, and withdrew the chloroform; the patient's face became very pale, he made a few gasps, emptied his bladder, and, I believe, then died. An injection of brandy was immediately given, and artificial respiration was continued for full half an hour; galvanism was likewise tried without any avail.

I made the *post-mortem* examination twenty-three hours after death. Dr. Britton, who was in the room making another *post-mortem*, kindly gave me the benefit of his valuable opinion upon the points I submitted to him.

General appearances.—Body not at all ill nourished. Rigor mortis but slight. Some lividity about the ears, face, and neck.

Chest.—Lungs well collapsed. No pleuritic adhesions. There was about a drachm and a half of serum in the pericardium. All the cavities of the heart contained fluid blood, and the heart was perfectly healthy. A microscopic examination failed to detect any fatty degeneration. Both lungs were healthy. There was no odour of chloroform to be detected in them. The aorta was free from atheromatous deposits.

Abdomen.—Liver slightly enlarged (weighing four pounds six and a half ounces), but healthy in structure. The left kidney was twice the size of the right, both were healthy. The spleen was softer than usual, breaking down with the slightest touch. There was no peculiarity about the pancreas. The stomach contained a small quantity of semi-fluid material, and was healthy, as were also the intestines.

Head.—There was a little fluid beneath the arachnoid. The surface of the brain was perhaps slightly paler than usual. On the under surface of the anterior portion of the middle lobe—right hemisphere—there was a depression containing a pulpy mate-

rial, which Dr. Bristowe suggested to be probably the remains of an old clot—a microscopic examination confirmed this view. There was a similar condition of the under surface of the anterior lobe of the same side, the olfactory bulb being destroyed. The lateral ventricles contained a small quantity of fluid. There was no other deviation from healthy structure observable.

Examination of the right Ankle.—A sloughy wound existed on the outer side and communicated with the joint—on the inner ankle was another sloughy sore and there was also ulceration on the instep. The astragalus was found to be normally placed with regard to the tibia and fibula; the foot was turned inwards. The cartilage was removed from the upper surface of the astragalus, and softened bone exposed. The opposed articulating surfaces of the os calcis and astragalus were likewise denuded of cartilage. There was no fracture of tibia or fibula.

Anæsthesia by Chloroform.—The immunity from pain is a privilege so precious, that life itself is sometimes thought hardly too great a stake to play when enduring agony is risked on the other side. But it can never be the duty of the surgeon to endanger life for any other prospective gain to his patient; this must always be the highest consideration for him, and all else is lessened by comparison with its all-importance. If, then, it can be shown that the danger to life from the use of chloroform exceeds the saving of life which it can effect; if it can be shown that so many lives have been sacrificed by the employment of this anæsthetic, while there has been no corresponding gain in decreased mortality after operations arising from the earlier application of surgical procedure, due to a diminished repugnance to submit to such treatment, from the increased security and perfection which deliberation and immobility have brought to our modern operations, from the lessened shock, from the abstraction of pain, from the absence of the agonized anticipation, that broke the mental power and destroyed tranquillity; if it could not be shown that from all these causes chloroform has been successful in diminishing mortality to a larger extent than it has caused deaths, then we think that surgeons would not be justified in recommending its inhalation to their patients. But we believe that the evi-

dence on this score is sufficiently strong to justify operators in thus mercifully annihilating the agony, and with it, the terrors of the knife. It is to this end that the controversy has tended, which has been so ably supported by Mr. T. Holmes and Dr. Fenwick against Dr. Arnott; and that this conviction is entertained by all those best qualified, by their great experience, to judge, is best shown by the daily practice of hospital surgeons. There remains the great problem for study—how best to avert the danger which attends the inhalation of chloroform. We have repeatedly urged in these columns the duty of taking such precautions as the latest results of the experience of practised chloroformists can suggest. We have especially urged the importance of carefully regulating the proportion of chloroform to that of the atmospheric air inhaled; and this not by any rule of thumb, such as the approximation or removal of a cloth damped with chloroform, but by the most accurate instrument which mechanical skill can supply. Other precautions are—the regulation of the quantity (one drachm at a time), the prescription of slight preliminary abstinence, and so forth. We need not repeat these rules; they have been more than once laid down in these columns. They are followed and approved by those most accustomed to the administration of chloroform. They were indorsed by Mr. Potter, the chloroformist of St. George's Hospital.¹ They received last week the indorsement of Dr. Anstie, of King's College Hospital,² who emphatically repeated our cautions almost *totidem verbis*, as borne out by his own experience. They accord with the opinions of Dr. Richardson, the friend and biographer of the late Dr. Snow; and we are glad to find that they receive the support of Dr. Martin, of St. Bartholomew's Hospital. In a Cambridge thesis on this subject, Dr. Martin reviews the dangers attendant upon the inhalation of chloroform. He considers them to arise from the influence of chloroform upon the medulla oblongata and sympathetic system, from "peculiar susceptibility" of the vital organs and nervous centres, and perhaps sometimes from shock. The latter cause may fairly be expunged, since it is, in a greater degree, characteristic of operations performed without anæsthesia. There remains

¹ See the *Lancet*, vol. II., 1856, p. 32.

² *Ibid.*, vol. II., 1856, p. 97.

a theory which is more comprehensive than satisfactory, and is, perhaps, rather an apology than an explanation. Be this as it may, Dr. Martin concurs in the opinion that "the best guarantee of safety is to be obtained by such cautious administration of the chloroform as may prevent the air and the blood in the lungs from being surcharged with the vapour, and by a jealous watching of the patient while he is being subjected to its influence." We trust that this accumulation of authorities will make surgeons more than ever loth to have recourse to the use of so loose and irregular a proceeding as the administration of chloroform on a handkerchief or napkin, or in any other way than through the most scientifically devised inhaler.—*Lancet*, July 30, 1859.

Occasional danger of the Ophthalmoscope.—M. Desmarres states, in the *Gazette des Hôpitaux* of the 9th ultimo, that severe facial neuralgia was excited in a woman sixty-six years of age, by the use of the ophthalmoscope. She was affected with complete glaucoma of the right eye, and applied to the dispensary for facial neuralgia of the same side, from which she had been suffering for the last eleven years. The left eye seemed sound; but, on being viewed with the ophthalmoscope, it was found affected with the optical form of glaucoma described by Heger. Several medical men successively examined the patient with much gentleness, and she complained neither of fatigue nor of being dazzled. But the eye became painful towards evening, and a neuralgic pain, of the same kind as had long existed on the right side, occurred on the left. The pain became intolerable on the two following days; and, when the patient called again at the dispensary, all the symptoms of acute glaucoma were observed on the left side: M. Desmarres considers that an occasional cause of such an attack may be an ophthalmoscopic examination.—*Lancet*, July 30, 1859.

Is Inguinal Hernia really rare in Female Children?—Most of our readers, including many of those who have enjoyed considerable opportunities of observation, will, no doubt, answer the above question with a most confident affirmative. Inguinal hernia is generally considered to be rare in the female sex, but especially so among its younger part. The statistics of hernia operations

which we have from time to time published, from the different hospitals, number upwards of 800 cases, and comprise many cases of inguinal hernia in male infants, but not a single one in which the patient was a girl. We recorded a few weeks ago as a rarity, an example of inguinal hernia in a girl of eight, which had come under notice at Guy's Hospital. Since then, in conversation with Mr. J. A. Kingdon, the able Surgeon to the London Truss Society, we have been assured that the lesion in question is far from being so infrequent as has been supposed. Mr. Kingdon informs us that he has repeatedly seen inguinal hernia in female children, and even in young infants. His sphere of observation at the institution referred to, is, of course, very large indeed. He explains the present erroneous belief of the Profession on this subject, by reference to the fact, that inguinal herniæ in young females are rarely of large size, and never become strangulated, so that they attract but little attention. Still, however, even admitting that this might account for their not being often seen at hospitals, we should have expected to meet with them oftener in private practice than we do. Mr. Kingdon assures us further, that inguinal hernia in adult females is shown by reference to the books of the Truss Society, to be of a far greater comparative frequency as regards the femoral form, than is usually supposed. These books have been regularly kept, and their records since Mr. Kingdon took office, agree in this matter with those of former years, when Mr. Taunton was the surgeon. Here, again, the same explanation is resorted to. Femoral herniæ are very prone to strangulation, while inguinal in women, are, on the contrary, almost always of insignificant size, and easily reducible.—*Med. Times and Gaz.*, July 9, 1859.

Paralysis of the Pharynx and General Paralysis after Diphtheria.—M. MAINGAULT lately read before the Medical Society of the Hospitals of Paris an important paper on the above mentioned affections. We find by the excellent report of M. Henri Roger, physician to the Children's Hospital, that M. Maingault, by collecting the cases published and adding his own, has been able to ground his essay upon fifty cases of pharyngeal and general paralysis. These affections generally occur during the

convalescence of diphtheria, and are looked upon as unconnected with any lesion of the nervous centres. Recovery is the rule, and is promoted by steel, bark, sulphurous and saline baths, cold douches and stimulating frictions. In a few cases, special excitants of the nervous system, such as strychnine and electricity, have been found extremely useful.—*Lancet*, Aug. 20th, 1859.

Medicated Subcutaneous Injections.—Dr. Alex. Wood's method of injecting narcotic solutions into the cellular tissue is finding favour in France. M. Béhier, an hospital physician of Paris, has made numerous experiments respecting this mode of removing pain, and has communicated the results to the Academy of Medicine.

The fluid injected in these experiments was a solution of sulphate of atropine, six grains to an ounce of water, which gives a proportion of the fiftieth part of a grain to every five drops of the solution. Fifty-three patients, affected with various kinds of neuralgia, were injected close to the seat of pain with this solution; twenty-two others with a solution of sulphate of strychnine, in the same proportions as had been observed for the sulphate of atropine. A solution of muriate of morphia was also injected in a case of slight lead colic. Pain was always relieved, and cures were effected in all the cases where the injections were sufficiently repeated—namely, in thirty-one cases out of the fifty-three. Signs of belladonna poisoning occurred in all, which was combated by opium.

M. Béhier has tried to remove pain by injections into the cellular tissue at a distance from the seat of the uneasiness, so as to put the assertions of Mr. C. Hunter to the test; but always unsuccessfully. The same physician thinks that injections of medicated fluids into the cellular tissue afford very great advantages in cases of neuralgia and paralysis; and that these injections will yield the best results in other affections, where it is important that the medicinal substances should act upon the organism at large.—*Lancet*, Aug. 20.

Forcible Extension of the Knee-Joint; Appearances on Post-Mortem Examination.—M. DEMARQUAY mentioned the following case at one of the late meetings of the Surgical Society of Paris: A boy, ten years old, from South America, was sent to him

with white swelling of the knee. The flexion of the joint was so great that the heel touched the posterior aspect of the thigh. Slight mobility of the patella and of the articulation; great emaciation; chest sound. Evacuation of a small quantity of pus by the trocar, and subsequent injection of iodine, were well borne. Soon afterwards, the joint was forcibly stretched whilst the patient was insensible with chloroform, and placed in a concave splint, which was soon replaced by a starch bandage. Some little time elapsed, when the boy was suddenly carried off by pneumonia.

On examination of the joint, no pus was found in it, but the femur was considerably bent in its lower portion, and the bone was found fractured along its posterior surface, the anterior lamella being sound. Lungs studded with tubercles. The fracture was evidently caused by the forcible extension.

M. Chassaignac observed that bones in such operations are much more frequently broken than surgeons imagine, which accident occurs, according to another speaker (M. Broca), from softening of the bones. Such fractures have been known, however, to unite pretty rapidly. We hold that the reduction of luxations, or forcible extension of joints, carried on whilst the patient is narcotized, should be performed with great caution, as the guide presented by the sensations of the patient is quite absent, and great mischief might follow the reckless employment of force.

The Ophthalmoscope in cases of suspected Malingering.—A case came under observation in Mr. Dixon's Clinique at the Royal London Ophthalmic Hospital, which put in a strong light the usefulness of the ophthalmoscope in cases of alleged imperfect sight without ostensible symptoms. It is well known that in the public services loss of sight is very frequently pretended, in order to obtain a discharge. To ascertain whether the imperfection of sight really existed or not, has many a time taxed to the utmost the ingenuity of the army or naval surgeon. Cases of genuine amaurosis in which no external symptoms can be perceived, but in which, as in Milton's instance,

"The eyes, though free to outward view of blemish or of spot,
Bereft of light, their seeing have forgot,"

are far from infrequent. Immobility or very marked sluggishness of the pupil is,

it is true, present in a majority of these. But in their earliest stage this symptom is for the most part wanting. Many a sailor or soldier has, we doubt not, remained long under the suspicion of malingering, in whom retinal apoplexies did really exist, or who was affected with commencing atrophy of the optic tracts. In the discovery of these lesions the ophthalmoscope will henceforth afford most valuable aid.

The man whose case has induced us to make the above remarks is a healthy looking sailor, of about 30, who applied to Mr. Dixon for advice respecting his eyes on Thursday last. He had been in the navy, and had recently, with much difficulty, obtained an order of discharge. He could see large objects, and even perceive large print when placed in certain positions before him, but could not see at all distinctly. There was no trace of congestion about the eyes, and the irides were free and the pupils readily mobile. As far as the most careful inspection could go without instrumental aid, the organs appeared quite normal. Mr. Dixon ordered the use of atropine drops, and as soon as the pupils were well dilated proceeded to an ophthalmoscopic examination. With the greatest ease it was now seen that both retinæ were blotched over with apoplectic extravasations of very various sizes, but many of them abruptly margined. The wonder was, that with such extensive disease the man could see as well as he did.

Apart from the benefit conferred in such a case as the above by the ophthalmoscope in supplying an objective symptom to a case before wholly based upon subjective ones, and therefore liable to much doubt, it furnished also very valuable knowledge as regards treatment. As soon as a surgeon who, without instrumental aid, had arrived at the conclusion that the man was not shamming, his next impulse under the old system would, no doubt, have been to give a course of mercury, in the hope of arresting the unseen and unknown pathological changes. And such treatment under such circumstances would have been quite justifiable. Knowing, as we now do, however, that the partial amaurosis is not due to chronic inflammation, but to extravasations of blood—a sort of purpura of the retina and choroid—we see the futility of such treatment and the danger which would attend it. The extravasations under con-

sideration often occur in the subjects of albuminuria, and are probably, even when the patient appears healthy, always a sign of impoverished fluids. Under such circumstances mercury is little less than a poison.—*Med. Times and Gaz.*, July 9th, 1859."

—
Mr. Syme and American Surgery.—Dr. E. D. TURNER, in a letter from Edinburgh to the *New Orleans Med. News and Hospital Gaz.*, Sept. 1859, gives the following account of some remarks of Prof. Syme in regard to American Surgery:—

"I went to the Royal Infirmary on Mr. Syme's clinical day to hear him talk and see him operate. His manner is exceedingly plain and unpretentious. He speaks low, and with marked Scottish pronunciation. When he entered the operating room he took a seat, and commenced speaking of the first operation that was to be performed—a case of simple *harelip* in a young child. He explained the nature of the complaint, mentioned the different methods of operating that had been resorted to, and spoke of the superior advantages of the *silver suture*. Mr. Syme here took occasion to remark that Europe was indebted to America for two of the greatest improvements in modern surgery—the use of *anæsthetic agents* and the *silver suture*, both of which he should apply to the case about to be operated on. He unhesitatingly accorded to our distinguished countryman, Dr. Sims, of New York, the entire credit of introducing the silver wire suture into surgical practice, notwithstanding the *emvious* attempt that had been made to show that it is not a recent invention at all, but a thing long known to the profession. He said that a clever young surgeon from America, naming Dr. Bozeman, was over here last year, claiming to have made a great improvement on Dr. Sims' operation for *vesico-vaginal fistula*; but, for his part, he could not perceive the improvement. The whole merit of that great operation he said was due to the silver suture, which enabled the surgeons of the present day almost invariably to remove a loathsome infirmity that formerly defied the skill of the profession. He said a distinguished American surgeon had remarked to him last year that he thought it was time that America should begin to do something in return for all she had received from Europe. Dr. S. said he thought the latter

was now amply compensated by the two great discoveries just mentioned."

The Physical Phenomena of Revivals.—We felt it a duty lately to express the conviction, which is universal amongst medical practitioners, and which is felt in common with them by all who have any cognizance of the healthy or diseased workings of the human frame, that the violent physical "manifestations" which have accompanied the "revivals" in the North of Ireland, are morbid and injurious phenomena, which are comparable with similar conditions seen in hospitals where hysteria is prevalent, and witnessed in all female communities in crises of excitement and agitation. The insensibility, the sudden relaxation of muscular power, the prolonged convulsions, the foaming at the mouth, the rolling of the eyeballs, the fixed and glassy stare, the wild dreams, the incoherent ravings, which are viewed by the friends of these "revivals" as signs of regeneration that should be encouraged and propagated, are well known to be the indicia of hysterical and epileptiform seizures, consequent upon an overwrought condition of mind, and an enfeeblement of the body due to prolonged absence and to great mental excitement. Without entering into any other view of the condition, it must be pronounced to be one of induced disease, mischievous and morbid in itself, and fraught with serious possible consequences to body and mind. That statement has met with great disfavour amongst a small portion of the Irish press, and *THE LANCET* has been warmly abused for taking such a view of these phenomena. This is so far a matter of congratulation that it has served to attract attention to it in quarters where it was else little likely to reach. We had no intention of furnishing matter for pulpit oratory, but physical phenomena have been pressed so mischievously into the service of fanaticism, that we are glad to have afforded arms to the eminent divines of Belfast, with which they are successfully combating a great evil. The Rev. W. M'Ilwaine, an eminent preacher of Belfast, in a lecture which he delivered last week, stated that he knew of seven persons, in the immediate vicinity, who were manics through the influence of the movement. Two were paralytics, one of whom was not likely to survive.—*LANCET*, July 23, 1859.

The Cholera in Germany.—A letter from the Grand Duchy of Mecklenburg, in the *Augsburg Gazette*, says: "The cholera has broken out with great violence in some towns and villages in this duchy, and many of the persons attacked have died after only four or five hours' suffering. In some of the villages the harvest operations have been suspended for want of hands, sixty to seventy persons having been taken ill at the same time. The disease breaks out first in one place and then in another, sparing for a time intermediate villages, and then turning back on them with increased violence. The ports of Rostock and Warnemünde have not escaped the malady which was brought there, it is supposed, by a vessel from St. Petersburg. The cholera continues to rage at Hamburg, carrying off from sixty to seventy persons daily."—*LANCET*, Aug. 20.

Cholera.—This epidemic is spreading along the shores of the Baltic. Its presence in Dantzic is officially acknowledged, as well as in Osnabruck and Elberfeld; and it is reported to have made considerable ravages at Hamburg.—*Ibid.*, Sept. 3, 1859.

Cholera at Bombay.—Information from Bombay, dated June 23d, states that at many of the stations on that side of India, cholera has been very prevalent during the month, in many places carrying off large numbers, and exhibiting itself in a virulent type. On the island of Bombay, it has proved fatal to a large number of natives. We regret to say that Lieut. E. M. Smith, R. N., Admiralty agent of the Peninsular and Oriental steamer, *Granada*, has fallen a victim to it.—*Ibid.*

New Professor of Physiology of Paris.—Dr. Longet, well known by his valuable contributions to science, has been appointed Professor of Physiology at the Faculty of Medicine of Paris.

Poisoning Through Eating Potato Seeds.—The daughter of a gentleman at Birkenhead, fourteen years of age, lately went into the garden which adjoins the house they were staying at and ate a quantity of potato bells. Next day she was taken very ill, and vomited a great deal. A surgeon was called in, but she continued very ill until the ensuing day, when she died.—*LANCET*, Aug. 20.